

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Carrier Current Systems, including Broadband over	)	ET Docket No. 03-104
Power Line Systems	)	
	)	
Amendment of Part 15 regarding new requirements	)	
and measurement guidelines for Access Broadband	)	ET Docket No. 04-37
over Power Lines	)	
	)	
To: The Commission	)	

**COMMENTS OF  
THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.**

The Association for Maximum Service Television, Inc. (MSTV)<sup>1</sup> supports the Commission's efforts to make new technologies available to consumers. Indeed, MSTV has played a central role in one of the most ambitious technology deployment efforts in recent memory, the transition of the nation's television broadcasting system to digital technology. That transition, like the deployment of Access Broadband over Power Lines (Access BPL) technology, offers important benefits for consumers throughout the country. To ensure that *both* digital television (DTV) and Access BPL are successfully delivered to consumers, MSTV urges the Commission to limit Access BPL technologies to operation below the low-VHF TV band. This is the scope of operation proposed by Access BPL proponents and contemplated in the

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<sup>1</sup> MSTV is a non-profit trade association of local broadcast television stations committed to achieving and maintaining the highest technical quality for the local broadcast system.

Notice of Proposed Rulemaking.<sup>2</sup> Accordingly, the proposed limitation should not impede the deployment of Access BPL services to consumers.

**I. BROADBAND OVER POWER LINES OPERATIONS ABOVE 50 MHz COULD CAUSE SUBSTANTIAL INTERFERENCE TO DIGITAL AND ANALOG TELEVISION OPERATIONS IN THE LOW VHF BAND**

As described in the Joint Comments of MSTV and the National Association of Broadcasters (NAB) on the BPL Notice of Inquiry,<sup>3</sup> evidence suggests that Access BPL systems operating between 50 MHz and 80 MHz would cause interference to television stations, particularly DTV stations, operating on channels 2 through 5 (spanning 54-72 and 76-82 MHz).<sup>4</sup> Studies in Japan and Europe have shown that BPL systems can significantly increase the noise floor in the bands in which they operate and thereby cause interference to licensed services.<sup>5</sup> Studies also show that multi-carrier modulation techniques employed by Access BPL systems have a spectral profile that resembles impulse noise. DTV interference studies in turn have shown that DTV reception in the low VHF band is severely impaired by impulse noise.<sup>6</sup> The Commission itself has recognized that the low VHF TV channels are vulnerable to interference from “higher ambient noise levels due to leaky power lines, vehicle ignition systems, and other

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<sup>2</sup> Notice of Proposed Rulemaking, *Carrier Current Systems, including Broadband over Power Line Systems; Amendment of Part 15 regarding new requirements and measurement guidelines for Access Broadband over Power Line Systems*, ET Docket Nos. 03-104, 04-37, FCC 04-29, ¶ 5 (rel. Feb. 23, 2004) (*BPL NPRM*) (“Most Access BPL systems today operate on frequencies up to 50 MHz.”).

<sup>3</sup> Notice of Inquiry, *Inquiry Regarding Carrier Current Systems, including Broadband over Power Line Systems*, ET Docket No. 03-104, 18 FCC Rcd 8498 (2003) (*BPL NOI*).

<sup>4</sup> Joint Comments of the Association for Maximum Service Television, Inc. and the National Association of Broadcasters, ET Docket No. 03-104, at 3-4, 6-8 (July 7, 2003) (*MSTV/NAB NOI Comments*).

<sup>5</sup> *Id.* at 3-4 (citing studies).

<sup>6</sup> *Id.* at 6-7.

impulse noise sources.”<sup>7</sup> In the DTV context, the resulting impairment results in a complete loss of picture for the consumer.

There is no evidence in the record refuting MSTV’s concerns about potential interference from Access BPL to low VHF television operations. Because their proposed systems generally operate below 50 MHz, Access BPL proponents have submitted virtually no evidence about the type and scope of interference that could be expected from Access BPL technologies operating above 50 MHz.<sup>8</sup> In the absence of such evidence, the Commission should not permit Access BPL to operate in the low VHF TV band.

The Commission should not threaten the success of the DTV transition to authorize Access BPL services (at 50-80 MHz) that have not even been proposed. Digital television is just beginning to reach a critical mass, and consumer investment in DTV receivers is expected to increase dramatically in the coming years. That momentum could be derailed if Access BPL services begin causing interference to DTV reception. Moreover, the introduction of Access BPL services in the low VHF band could interfere with the later stages of the DTV transition by complicating the “spectrum re-packing” process that will take place as broadcasters return their analog spectrum to the Commission and choose a permanent home between their NTSC and DTV channel assignments. Broadcasters that had been planning to move their DTV operations from the UHF band to their low VHF NTSC assignments might be unwilling to do so if the low VHF band faced the threat of interference from Access BPL services. This would

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<sup>7</sup> See *id.* at 6 (quoting Sixth Report and Order, *Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, 12 FCC Rcd 14588, ¶ 82 (1997)).

<sup>8</sup> See, e.g., *BPL NPRM* ¶ 20 (noting BPL industry claims concerning emission limits at 30-50 MHz), ¶ 25 (noting claims that “Access BPL operate only on frequencies below 50 MHz”).

complicate an already difficult process and undermine the Commission's goal of recovering analog television spectrum for reassignment to new uses.

In sum, the threat of interference from Access BPL services to low VHF television operations, including DTV reception, is significant and undisputed. The effect of such interference could derail the DTV transition just as it is taking off. The Commission should expressly protect low VHF operations from the threat of Access BPL interference.

## **II. LIMITING OPERATIONS TO FREQUENCIES BELOW 50 MHz WILL NOT IMPEDE THE DEPLOYMENT OF BROADBAND OVER POWER LINES SERVICES**

MSTV's proposal to confine Access BPL services to frequencies below 50 MHz should facilitate the transition to DTV while having no meaningful adverse effect on the deployment of Access BPL services to consumers. The *BPL NPRM* acknowledges that the Access BPL systems described in response to the *BPL NOI* "operate on frequencies up to 50 MHz."<sup>9</sup> In discussing the interference concerns arising from Access BPL operations, the Commission focused exclusively on licensed services operating below 50 MHz.<sup>10</sup> The Commission apparently discounted the possibility of interference to low VHF television because the proposed Access BPL systems did not contemplate operation above 50 MHz.

Because Access BPL proponents have not proposed to use frequencies from 50-80 MHz for Access BPL services, there is no reason to believe that they need access to these frequencies to serve the public. Denying that access, therefore, would provide valuable reassurance to broadcasters and consumers about the reliability of low VHF DTV services while having no adverse effect on the deployment of Access BPL services.

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<sup>9</sup> *Id.* ¶ 4.

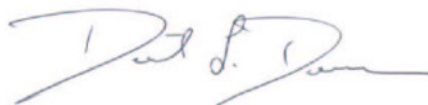
<sup>10</sup> *Id.* ¶¶ 14-19.

## CONCLUSION

MSTV supports the Commission's efforts to promote the delivery of new technologies to consumers. In this proceeding, that broad goal can best be effectuated by limiting the operation of Access BPL services to frequencies below 50 MHz. This limitation will enable widespread deployment of Access BPL services while protecting low VHF television stations, particularly DTV stations, from potentially harmful interference.

Respectfully submitted,

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A handwritten signature in blue ink, appearing to read "David L. Donovan".

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David Donovan  
President

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